

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:

Micke et al.

Serial No.: Not yet assigned

Filed: Herewith

Atty. File No.: 3957-8-DIV

For: "METHOD AND APPARATUS FOR
REMOVING OBSTRUCTIONS IN
MINES"

) Group Art Unit: 3643
)
)

) Examiner:
)
)

) FIRST PRELIMINARY AMENDMENT
)
)

) "EXPRESS MAIL" MAILING LABEL NUMBER: EL 822581202 US
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) I HEREBY CERTIFY THAT THIS PAPER OR FEE IS BEING DEPOSITED
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) TYPED OR PRINTED NAME: Angela P. Davis
)
)

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)

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Prior to the initial review of the above-identified patent application by the Examiner, please enter the following Preliminary Amendment. Although Applicants do not believe that any fees are due based upon the filing of this Preliminary Amendment, please charge any such fees to Deposit Account 19-1970.

Please amend the above-identified patent application as follows:

IN THE SPECIFICATION:

Please replace the paragraph at page 1, lines 4-12, with the following:

CROSS REFERENCE TO RELATED APPLICATIONS

The present application is a divisional application of U.S. Application Serial No. 09/173,876, filed October 16, 1998, and entitled "Method and Apparatus for Removing Obstructions in Mines",

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Application No.: Not yet assigned
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which claims priority both from U.S. Provisional Patent Application Serial No. 60/062,537, filed October 17, 1997, and entitled "A Method and Apparatus for Removing Draw Point Blockages, Scaling Unstable Rock Formations and Breaking Free-Standing Boulders" and from U.S. Provisional Patent Application Serial No. 60/087,058, filed May 28, 1998, and entitled "Method and Apparatus for Removing Obstructions in Mines," which are incorporated fully herein in their entireties.

Please amend the paragraph at page 17, line 11, to page 18, line 5, as follows:

The detonating device 90 is movably and loosely mounted in a detonating device passageway 134 to permit the detonating device to experience some lateral (side-to-side) and longitudinal (end-to-end) movement. This is accomplished by having a gap between the outer walls of the detonating device 90 and the inner walls of the detonating device passageway 134. It has been discovered that the gap provides more reliable initiation compared to a detonating device that is securely held in a fixed position in the passageway. The gap between the side wall of the detonating device and the side wall of the pocket preferably ranges from about 0.5 to about 4.0 mm. The detonating device 90 is further capable of moving back-to-front by contacting with the explosive charge. Preferably, the detonating device volume ranges preferably from about 45 to about 90 percent of the pocket volume; the length of the detonating device ranges preferably from about 75 to about 100% of the length of the pocket; and the width of the detonating device ranges preferably from about 65 to about 95% and more preferably from about 75 to about 85% of the width of the pocket.

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IN THE CLAIMS:

Please cancel Claims 9-26 without prejudice to or disclaimer of the subject matter contained therein.

REMARKS/ARGUMENTS

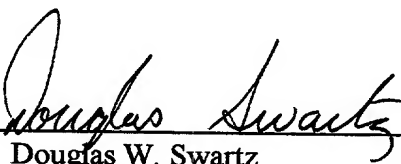
The above amendments are being submitted in connection with the national stage filing of the present Application. The amendments eliminate the multiple dependent claims from the Application.

Attached hereto is a marked up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version With Markings to Show Changes Made."

Respectfully submitted,

SHERIDAN ROSS P.C.

By: _____



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(303) 863-9700

Date: _____

Nov. 2, 2001

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification:

Replace the paragraph at page 1, lines 4-12, as follows:

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